

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-22 are pending the present application. Claims 1, 3, 9, 13, 16, 17, 18, and 20 have been amended by way of this amendment. Claims 1, 13, and 21 are independent claims.

CLAIM AMENDMENTS

Claims 3, 9, 17, and 20 have been amended to correct minor typographical errors. Further, claims 1, 13, 16, 17, and 18, have been amended so as to be in accordance with proper United States Patent and Trademark Office practice and procedure. Thus, Applicants assert that now new matter has been added by way of this amendment. Further, Applicants assert that no changes have been made to alter the scope of the claims in any way.

PRIOR ART REJECTIONS

Claims 1-22 stand rejected under 35 U.S.C. §102(b) as being anticipated by Kamon (U.S. Patent No. 5,815,685). Applicants respectfully traverse this art grounds of rejection.

Kamon is directed to a method and apparatus for correcting light proximity effects in exposure of a resist material. Specifically referring to FIG. 2, Kamon discloses a light proximity correction system including a design data input unit (1), a data compression unit (2), an optical image formation unit (3), a prediction unit (4), a comparison unit (5), a correction unit (6), a data expansion unit (7), and a corrected data output unit (9).

Design data relating to a circuit pattern is input to the design data input unit and compressed via the design compression unit. An optical projection image is formed by the optical image formation unit, and will be used later to transfer a pattern onto a wafer according to the design data input. The size of the pattern is predicted by the prediction unit based on the projection image formed by the optical image formation unit. A comparison unit is then used to calculate the difference between the size of the prediction unit and the size of the pattern designated by the design input data. The design data which is compressed is corrected by an amount equal to the difference determined via the comparison unit. The data is then expanded by an expansion unit, and output via the corrected data output unit (see Kamon, col. 1 line 61- col.2 line 14.

However, Applicants assert that Kamon does not disclose or suggest “producing a mask with a predetermined pattern according to input data,” nor “producing a second mask with a pattern according to second input data and modified to diminish the measured deviations, and thus compensate for production distortion;” as recited with respect to claim 1.

With respect to claim 10, Kamon does not disclose or suggest “a first mask generator for producing a mask with a predetermined pattern according to input data;” nor “a second mask generator for producing a second mask according to second input data.”

Further, with respect to claim 21, Kamon does not teach or fairly suggest “exposing a substrate with radiant energy and according to input pattern data to impose a predetermined pattern on the substrate,” nor “a geometry correcting system for correcting the pattern being imposed in the substrate according to digital distortion data.”

Instead, Kamon discloses only produces an optical projection image (see Kamon col. 1 line 65-col. 2 line 3) to be used in calculating the correction amount to be used by the correction unit (see Kamon col. 2 lines 5-11).

Therefore, Applicants assert that claims 1, 13, and 21 are allowable over the prior art for at least the reasons given above.

With respect to claims 2-12, 14-20, and 22, Applicants assert that claims 2-12, 14-20, and 22 are allowable for at least the reasons given above with respect to claims 1, 13, and 21.

Therefore, Applicants respectfully request that the above rejection be withdrawn.

CONCLUSION


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John A. Castellano at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By



John A. Castellano, Reg. No. 35,094
P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

JAC/AMW